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FILE COVERS 1907 - 14 Jul 2008 VOL 149 ISS 3 FILE LAST UPDATED: 13 Jul 2008 (20080713/ED)

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http://www.cas.org/legal/infopolicy.html

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Structure attributes must be viewed using STN Express query preparation.
L3 77 SEA FILE-REGISTRY SSS FUL L1
L4 7 SEA FILE-CAPLUS L3

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.4 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:218143 CAPLUS

DOCUMENT NUMBER: 144:292764

TITLE: Preparation of aminotetrazoles analogues as P2X7
purinoreceptor antagonists for the treatment of

inflammatory and neuropathic pain
INVENTOR(S): Carroll, William A.; Perez-Medrano,

Carroll, William A.; Perez-Medrano, Arturo; Florjancic, Alan S.; Nelson, Derek W.; Peddi, Sridhar;

Li, Tongmei; Bunnelle, Eric M.; Hirst, Gavin; Li,

Biquin C.

PATENT ASSIGNEE(S): USA

SOURCE:

U.S. Pat. Appl. Publ., 133 pp., Cont.-in-part of U.S. Ser. No. 120,718. CODEN: USXXCO

DOCUMENT TYPE:

LANGUAGE:

English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060052374 US 20070049584 PRIORITY APPLN. INFO.:	A1 A1	20060309 20070301	US 2005-221333 US 2005-120718 US 2004-566238P P US 2005-120718 A2	20050907 20050429 20040429 20050429
OTHER SOURCE(S):	MARPAT	144:292764		

Pat.ent.

- AB Title compds. I and II [R2 = (un)substituted Ph, pyridinyl; V = (CXY)m; m = 0-3; X, Y, Z = independently H, alkyl; CXY = ring selected from (un) substituted cyclopropane, cyclohexane, piperidine, etc.; Z and X together with the atoms to which they are attached may form a ring selected from pyrrolidine, piperidine, piperazine, etc.; R1 = Ph, adamantyl, pyridyl, etc.; A, B, E = independently N and (un) substituted CH; R3 = (un)substituted alkyl, amino, etc.; n = 1-3; when n = 2-3, R3 may be the same or different; R4 = halo, NH2, alkyl, etc.; R5 = H, halo, NH2, etc.; and therapeutically acceptable salts, solvates, prodrugs, or salts of prodrugs thereof; with limitations and the exception of certain compds.] were prepared as P2X7 purinoreceptor antagonists. For example, addition of 2,3-dichlorophenyl isothiocyanate with 2-methylbenzylamine in THF for 1 h at room temperature followed by cyclization with sodium azide in the presence of mercuric acetate at room temperature for 16 h gave tetrazole III.
  - demonstrated antagonist activity at the P2X7 receptor in vitro with IC50 < 10  $\mu M$ . Thus, I are useful for treating chronic inflammatory and neuropathic pain, neurodegeneration, spinal cord injury, and depression.

IT 870062-24-1P, 1-(2,3-Dichloropheny1)-3-[3-[(pyrimidin-2-

yl)oxy]benzyl]thiourea

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of aminotetrazoles analogs as P2X7 purinoreceptor antagonists for treatment of inflammatory and neuropathic pain)

RN 870062-24-1 CAPLUS

CN Thiourea, N-(2,3-dichlorophenyl)-N'-[[3-(2-pyrimidinyloxy)phenyl]methyl]-(CA INDEX NAME)

$$\begin{array}{c|c} N & S \\ \hline & CH_2-NH-C-NH \\ \hline & C1 \\ \end{array}$$

L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1241277 CAPLUS

DOCUMENT NUMBER: 144:6791

TITLE: Preparation of aminotetrazoles analogues as P2X7

purinoreceptor antagonists for the treatment of inflammatory and neuropathic pain

INVENTOR(S): Carroll, William A.; Perez-Medrano, Arturo;

Florjancic, Alan S.; Nelson, Derek W.; Peddi, Sridhar;

Bunnelle, Eric M.; Hirst, Gavin C.; Li, Biqin

PATENT ASSIGNEE(S): Abbott Laboratories, USA; Li, Tongmei

SOURCE: PCT Int. Appl., 345 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PATENT NO.						KIND DATE				APPL	ICAT:		DATE						
	WO	2005	1110	03		A1	A1 20051124				WO 2			20050428						
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KP,	KR,	KZ,		
			LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,		
			NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,		
			SM,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,		
			ZM,																	
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,		
			AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,		
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,		
			RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,		
			MR,	NE,	SN,	TD,	TG													
	CA	2565	211			A1		2005	1124		CA 2005-2565211						20050428			
	EP	1747	206			A1		2007	0131		EP 2005-744712						20050428			
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,		
			IS,	IT,	LI,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR				
	JP	2007	5355	53		T		2007	1206		JP 2	007-	5109	81		2	0050	428		
	MX	2006	PA12	595		A		2007	0509		MX 2	006-1	PA12	595		2	0061	030		
PRIOR	ITY	APP	LN.	INFO	. :						US 2004-566238P					P 20040429				
											WO 2	005-1	US14	641	1	W 2	0050	428		

OTHER SOURCE(S):

MARPAT 144:6791

AB Title compds. I and II [R2 = (un)substituted Ph, pyridinyl; V = (CXY)m; m = 0-3; X, Y, Z = independently H, alkyl; CXY = ring selected from (un) substituted cyclopropane, cyclohexane, piperidine, etc.; Z and X together with the atoms to which they are attached form a ring selected from pyrrolidine, piperidine, piperazine, etc.; R1 = Ph, adamantyl, 2,3-dihydrospiroindene-1,4'-piperidinyl, etc.; A, B, E = independently N, CH and derivs.; R3 = (un)substituted alkyl; v = 0,2,3; when v = 2-3, R3 may be the same or different; R4 = C1, F, Nr, I, NH2, etc.; R5 = H, CN, Cl, Br, NH2, etc.; and therapeutically acceptable salts, solvates, prodrugs, or salts of prodrugs thereof; with the exception of certain compds. I were prepared as P2X7 purinoreceptor antagonists. Thus, addition of mercuric acetate and sodium azide to a prestirred mixture of 2-methylbenzylamine and 2,3-dichlorophenyl isothiocyanate in THF gave tetrazole III. I demonstrated antagonist activity at the P2X7 receptor in vitro with IC50 < 10 μM. Thus, I are useful for treating chronic inflammatory and neuropathic pain, neurodegeneration, spinal cord injury, and depression.

TIT

- IT 870062-24-1P, 1-(2,3-Dichlorophenyl)-3-[3-[(pyrimidin-2yl)oxyl)benzyl]thiourea RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
- (intermediate; preparation of aminotetrazoles analogs as P2X7 antagonists for treatment of inflammatory and neuropathic pain) RN 870062-24-1 CAPUS
- CN Thiourea, N-(2,3-dichlorophenyl)-N'-[[3-(2-pyrimidinyloxy)phenyl]methyl]-(CA INDEX NAME)

$$\begin{array}{c|c} N & S & \\ \hline N & O & - CH_2 - NH - C - NH \\ \hline & C1 & \\ \end{array}$$

THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 12 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:216619 CAPLUS

DOCUMENT NUMBER: 142:297864

Preparation of aniline derivatives and related TITLE:

compounds as c-kit modulators

INVENTOR(S): Cheng, Wei; Co, Erick Wang; Kim, Moon Hwan; Klein, Rhett Ronald; Le Donna, T.; Lew, Amy; Nuss, John M.;

Xu, Wei; Bajjalieh, William Exelixis, Inc., USA PCT Int. Appl., 169 pp. PATENT ASSIGNEE(S):

SOURCE: CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PARTITION	ACC.	INOLI.	COOL	4 7
PATENT	INFO	RMATI	ON:	

GI

PA	PATENT NO.					KIND DATE				APPL	ICAT	ION :	DATE						
	2005									WO 2004-US28001						20040827			
WO										D.D.	DO.	DD.	DIA	D17	De	0.3	CII		
	W :						AU,												
							DE,												
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KΡ,	KR,	ΚZ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,		
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,		
		TJ,	TM,	TN,	TR.	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW.	GH.	GM.	KE.	LS.	MW,	MZ.	NA.	SD.	SL.	SZ.	TZ.	UG.	ZM.	ZW.	AM.		
							RU,												
							GR,												
							CF,												
					Dr,	ы,	CF,	CG,	CI,	CPI,	GA,	GIV,	GQ,	GW,	PIL,	PIP.	INE,		
			TD,												_				
									AU 2004-268621										
															20040827				
EP	1663	204			A2		2006	0607		EP 2	004-	7824	73		2	0040	827		
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	HR	
JP	2007	5041	60		T		2007	0301		JP 2	006-	5249	05		2	0040	827		
US	2008	0096	892		A1		2008	0424		IIS 2	007-	5698	7.3		20070904				
PRIORIT															P 2				
11101111	T MEE														W 2				
OTHER S	OHDOR	/c).			MAD	D 7 T	1/2.	2070		NO Z	004-	0520	001		vi 2	0040	02/		
UINER S	UURCE	(5):			PIAR	PAI	142:	2910	04										

AB Compds. I [wherein ring A is a five- to fourteen-membered heteroaryl; R1, R2 and R3 are H, halo, trihalomethyl, cyano, nitro, etc.; L1 is a single bond, (un) substituted alkylene, O, CH2O, etc.; ring B is five- to ten-membered arvl or heterocyclyl; ring C is five- to ten-membered (hetero)aryl; L2 is alkylene, alkylidene, alkylidyne, etc.; with some limitations and exclusions, and pharmaceutically acceptable salts, hydrates or prodrugs thereof], as exemplified by carbonyl compds. of anilines, were prepared as c-Kit kinase modulators. For example, 3-aminophenoxyacetic acid, which was obtained from the corresponding nitro compound in 76% yield via catalytic hydrogenation, was treated with HC(OEt)3 and NaN3 in AcOH followed by NaNO2/HCl to give a tetrazole in 61% yield. This acid was coupled with 5-amino-2-chlorobenzotrifluoride in the presence of HATU to afford acetamide II in 46% yield, which showed inhibition against c-Kit kinase with a IC50 of < 50 nM. Therefore, I and pharmaceutical compns. thereof are useful for modulating c-Kit kinase activity and for treating diseases or disorders associated with uncontrolled, abnormal, and/or unwanted cellular activities. 847608-72-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(modulator; preparation of anilines and related compds. as C-kit modulators) RN 847608-72-4 CAPLUS

CN Urea, N-[4-chloro-3-(trifluoromethyl)phenyl]-N'-[[4-(2-pyrimidinyloxy)phenyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{CF}_3 \\ \text{O} \\ \text{CH}_2 - \text{NH} - \text{C} - \text{NH} \\ \end{array}$$

L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:370904 CAPLUS DOCUMENT NUMBER: 140:391200

TITLE: Preparation of pyridinyloxybenzylureas as RAF kinase inhibitors.

INVENTOR(S): Buchstaller, Hans-Peter; Wiesner, Matthias; Schadt,

Oliver; Amendt, Christiane; Zenke, Frank; Sirrenberg,

Christian; Grell, Matthias; Finsinger, Dirk

Merck Patent G.m.b.H., Germany PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 341 pp. CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT	INFORMATION:	

	KIND DATE																
WO 2004	1037789 1037789		A2		2004	0506					134		20031008				
W:	AE, AG, CO, CR, GM, HR,	CU, HU,	CZ, ID,	DE,	DK, IN,	DM, IS,	DZ, JP,	EC, KE,	EE, KG,	ES, KP,	FI, KR,	GB, KZ,	GD, LC,	GE, LK,	GH, LR,		
	LS, LT, PG, PH, TR, TT,	PL, TZ,	PT, UA,	RO, UG,	RU, US,	SC, UZ,	SD, VC,	SE, VN,	SG, YU,	SK, ZA,	SL, ZM,	SY, ZW	TJ,	TM,	TN,		
RW:	GH, GM, KG, KZ, FI, FR, BF, BJ,	MD, GB,	RU, GR,	TJ, HU,	TM, IE,	AT,	BE, LU,	BG, MC,	CH,	CY, PT,	CZ, RO,	DE, SE,	DK, SI,	EE, SK,	ES, TR,		
CA 2503											20031008						
								AU 2003-268926									
	905 AT, BE,																
Α.	IE, SI,														Е1,		
BR 2003	015580				2005										800		
CN 1705	645		A		2005	1207		CN 2	003-	8010	1925		2	0031	800		
	506454																
	PA04206				2005												
	00199044													0060			
PRIORITY APE			~ *								6						
											85P			0030			

OTHER SOURCE(S):

MARPAT 140:391200

WO 2003-EP11134 W 20031008

AB ADB ID = methyleneurea moiety or derivative thereof; A = (substituted) L(ML')a; L = 5-7 membered cyclic structure, e.g. aryl, heteroaryl, arylene, heteroarylene; L' = (substituted) cyclic moiety having ≥5 members, e.g. aryl, heteroaryl, aralkyl, cycloalkyl, heterocyclyl; M =

bond, bridging group having ≥1 atom; a = 1-4; B = (substituted) up to tricyclic aryl, heteroaryl], were prepared for treatment of hyperproliferative and nonproliferative disorders (no data). Thus,

4-(4-pyridinyloxy)benzylamine (preparation given) and 4-chloro-3trifluoromethylphenyl isocyanate were stirred together for 2 h in CH2C12 to give 1-(4-chloro-3-trifluoromethylphenyl)-3-[4-(4-

pyridinyloxy)benzyl]urea. 685533-65-7P 685533-66-8P 685533-67-9P

685533-68-0P 685533-71-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of methylene urea derivs. as RAF kinase inhibitors) RN 685533-65-7 CAPLUS

CN Urea, N-[4-chloro-3-(trifluoromethyl)phenyl]-N'-[[4-(4pyridinyloxy)phenyl]methyl]- (CA INDEX NAME)

- RN 685533-66-8 CAPLUS
- CN Urea, N-[4-chloro-3-(trifluoromethyl)phenyl]-N'-[[3-(4-pyridinyloxy)phenyl]methyl]- (CA INDEX NAME)

- RN 685533-67-9 CAPLUS
- CN Urea, N-[4-chloro-3-(trifluoromethyl)phenyl]-N'-[[4-(3pyridinyloxy)phenyl]methyl]- (CA INDEX NAME)

- RN 685533-68-0 CAPLUS
- CN Urea, N-[4-chloro-3-(trifluoromethyl)phenyl]-N'-[[3-(3-pyridinyloxy)phenyl]methyl]- (CA INDEX NAME)

- RN 685533-71-5 CAPLUS
- CN 2-Pyridinecarboxamide, N-methyl-4-[4-[[[[2-(methylsulfonyl)-5-(trifluoromethyl)phenyl]amino]carbonyl]amino]methyl]phenoxy|- (CA INDEX NAME)

IT 685534-00-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of methylene urea derivs. as RAF kinase inhibitors)

RN 685534-00-3 CAPLUS

CN 2-Pyridinecarboxamide, N-methyl-4-[4-[[[[2-(methylthio)-5-(trifluoromethyl)phenyl]amino]carbonyl]amino]methyl]phenoxy]- (CA INDEX NAME)

L4 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:664665 CAPLUS

DOCUMENT NUMBER: 135:366322

TITLE: Selective inhibition of ICAM-1 and E-selectin expression in human endothelial cells. 2. Arvl

modifications of 4-(aryloxy)thieno[2,3-c]pyridines with fine-tuning at C-2 carbamides

AUTHOR(S): Zhu, Gui-Dong; Arendsen, David L.; Gunawardana,

Indrani W.; Boyd, Steven A.; Stewart, Andrew O.; Fry, Dennis G.; Cool, Barbara L.; Kifle, Lemma; Schaefer, Verlyn; Meuth, Joseph; Marsh, Kennan C.; Kempf-Grote, Anita J.; Kilgannon, Patrick; Gallatin, W. Michael;

Okasinski, Gregory F.
CORPORATE SOURCE: Metabolic Diseases Research Pharmaceutical Products

Division Department 04MJ, Abbott Laboratories, Abbott

Park, IL, 60064-6101, USA

SOURCE: Journal of Medicinal Chemistry (2001), 44(21),

3469-3487

CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 135:366322

AB The elevated expression of cell adhesion mols. (CAMs) on the lumenal surface of vascular endothelial cells is a critical early event in the complex inflammatory process. The adhesive interactions of these CAMs

that include E-selectin, ICAM-1, and VCAM-1 with their counter-receptors on leukocytes, such as integrins of the GLB2 family, result in migration of the leukocytes to the site of inflammation and cause tissue injury. Pharmaceutical agents that could suppress the induced expression of one or more of these cell adhesion mols. would provide a novel mechanism to attenuate the inflammatory responses associated with chronic inflammatory diseases. A-205804, a potent and selective inhibitor of the induced expression of E-selectin and ICAM-1 over VCAM-1, was further modified with emphasis at the C-4 and C-2 positions to identify a more potent drug candidate with a good pharmacokinetic profile and phys. properties. Replacement of the C-4 sulfur linkage in A-205804 with an oxygen atom eliminated one of the two major metabolites for this lead mol. The para-position of the 4-phenoxy group of the thieno[2,3-c]pyridine lead is found to be very critical for a higher in vitro potency and selectivity of E-selectin and ICAM-1 over VCAM-1 expression. This position is presumably close to the solvent-accessible region of the target protein-inhibitor complex. An attempt to install a water-solubilizing group at the para-position of the phenoxy group to increase the aqueous solubility of this

lead

series through various linkages failed to provide an ideal inhibitor. Only small substituents such as fluorine are tolerated at the meta- and ortho-positions of the 4-phenoxy to retain a good in vitro potency. Bromo, trifluoromethyl, pyrazol-1-yl, and imidazol-1-yl are among the better substituents at the para-position. With fine-tuning at the C-2 position we discovered a series of very potent (IC50 < 5 nM for ICAM-1) and selective (>200-fold vs. VCAM-1) inhibitors with a good pharmacokinetic profile. Demonstrated efficacy in a rat rheumatoid arthritis model and in a mice asthma model with selected compds. is also reported.

T 373633-41-1P

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(selective inhibition of ICAM-1 and E-selectin expression in human endothelial cells: aryl modifications of aryloxythienopyridines with fine-tuning at C-2 carbamides)

RN 373633-41-1 CAPLUS

CN Thieno[2,3-c]pyridine-2-carboxamide, 4-[4-[[cyclohexyl]((cyclohexylamino)carbonyl]amino]carbonyl]henoxyl-M-methyl- (CA INDEX NAME)

PAGE 2-A

N. S

REFERENCE COUNT:

THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1998:102442 CAPLUS

40

DOCUMENT NUMBER: 128:238966
ORIGINAL REFERENCE NO.: 128:47129a,47132a

TITLE:

AUTHOR(S):

SOURCE:

Inhibitors of acyl-CoA:cholesterol O-acyltransferase (ACAT). Part 1: identification and structure-activity relationships of a novel series of substituted

N-alkyl-N-biphenylylmethyl-N'-arylureas

Tanaka, Akira; Terasawa, Takeshi; Hagihara, Hiroyuki; Sakuma, Yuri; Ishibe, Noriko; Sawada, Masae; Takasugi,

Hisashi; Tanaka, Hirokazu Medicinal Chemistry Research Laboratories, Fujisawa Pharmaceutical Co. Ltd., Osaka, 532, Japan

Bioorganic & Medicinal Chemistry (1998), 6(1), 15-30 CODEN: BMECEP; ISSN: 0968-0896

Elsevier Science Ltd.

Journal English

PUBLISHER: DOCUMENT TYPE: LANGUAGE:

CORPORATE SOURCE:

GΙ

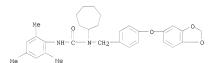
- AB A series of N-alkyl-N-biphenylylmethyl-N'-arylurea and related derivs. (I) were prepared and evaluated for their ability to inhibit acyl-CoArcholesterol O-acyltransferase in vitro and to lower plasma cholesterol levels in cholesterol-fed rats in vivo. Linking of two Ph groups via oxygen and introduction of fluorine at appropriate positions on the biphenyl moiety improved in vitro and in vivo activity. From this series of analogs, compound 40 (FRIP3254), which had potent in vitro potency (rabbit intestinal microsomes IC50 = 25 nM), showed excellent plasma cholesterol-lowering activity when administered via the date (ED50 = 0.045 mg/kg). However, the hypocholesterolemic effect of this compound was moderate when dosed by oral gavage in PEG400 as a vehicle (ED50 = 5.3 mg/kg). Modification of the N'-aryl moiety led to the identification of compound 50 (FR182980) which was efficacious in both dosing models (ED50 = 0.034 mg/kg and 0.11 mg/kg, resp.). steroids.
  - T 179054-10-5P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and structure-activity relationships of N-alkyl-N-biphenylylmethyl-N'-arylureas as anticholesteremics and acyl-CoA:cholesterol O-acyltransferase inhibitors)

RN 179054-10-5 CAPLUS

CN

Urea, N-[[4-(1,3-benzodioxol-5-yloxy)phenyl]methyl]-N-cycloheptyl-N'-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

.4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:455768 CAPLUS DOCUMENT NUMBER: 125:114322

ORIGINAL REFERENCE NO.: 125:21442h,21443a

TITLE: Preparation of urea derivatives as cholesterol

acyltransferase inhibitors

INVENTOR(S): Terasawa, Takeshi; Tanaka, Akira; Chiba, Toshiyuki; Takasuqi, Hisashi

PATENT ASSIGNEE(S): SOURCE: Fujisawa Pharmaceutical Co., Ltd., Japan

PCT Int. Appl., 228 pp. CODEN: PIXXD2

Pat.ent.

DOCUMENT TYPE:

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					KIND DATE					PLICA		DATE				
WC	9610				A1		1996					-JP1	982		1	.9950	929
							KR, ES,					, IT	, LU,	MC,	NL,	PT,	SE
IN	1995	MA01	229		A		2005	0225		IN	1995	-MA1	229		1	9950	922
CF	2200	981			A1		1996	0411		CA	1995	-220	0981		1	9950	929
At	9535	779			A		1996	0426		AU	1995	-357	79		3	9950	929
EF	7846	12			A1		1997	0723		EP	1995	-932	934		3	9950	929
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB	GI	R, IE	, IT	, LI,	LU,	NL,	PT,	SE
JE	1051	0512			T		1998	1013		JP	1995	-511	616		3	9950	929
ZA	9508	365			A		1996	0508		ZA	1995	-836	5		1	9951	004
PRIORIT	Y APP	LN.	INFO	. :						GB	1994	-199	70		A 1	9941	004
										GB	1995	-672	0		A 1	9950	331
										GB	1995	-140	21		A 1	9950	710
										WO	1995	-JP1	982		W 1	9950	929

OTHER SOURCE(S): MARPAT 125:114322

AB R4YC6H4(CH2)nNR2CONHR3 [R2 = (ar)alkyl, heterocyclyl(alkyl), alkoxyalkyl, etc.; R3,R4 = (un)substituted aryl, heterocyclyl; Y = bond, alkylene, O, CO, CONH, etc.; n = 0 or 1] were prepare Thus, 1-cycloheptyl-1-(4-phenoxyphenylmethyl)-3-(2,4,6-trifluorophenyl)urea had IC50 of 1.1x10-8M against cholesterol acyltransferase in vitro.

IT 179054-10-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of urea derivs. as cholesterol acyltransferase inhibitors)

RN 179054-10-5 CAPLUS

CN Urea, N-[[4-(1,3-benzodioxol-5-yloxy)phenyl]methyl]-N-cycloheptyl-N'-(2,4,6-trimethylphenyl)- (CA INDEX NAME)